

5 BEHAVIORAL ABSTRACTIONS FOR DEBUGGING COORDINATION-CENTRIC SOFTWARE DESIGNS

Abstract of the Disclosure

- A behavioral abstraction is, in an abstract sense, a generalization of an event
- 10 cluster. Behavioral abstraction is a technique where a predetermined behavioral sequence is automatically recognized by the simulator in a concurrent stream of system events. A behavioral sequence is at its most basic level a partial order of events. However, the events considered in a behavioral sequence are subject to configuration-based filtering and clustering. This allows a designer to create a model
- 15 for a particular behavior and then set up a tool to find instances of the particular behavior in an execution trace. Behavior models are representations of partially ordered event sequences and can include events from several components.